

Amendments to the Claims

1. *(Currently Amended)* A display method comprising
generating ~~(1)~~ images comprising source data (SDA) and source frame
synchronization instants (SSI) having a source frame rate (SFR);
storing ~~(2)~~ the source data (SDA) in a frame memory ~~(5)~~ under control
of a first address pointer (AP1) having a start address (DSA) being determined by the
source frame synchronization instants (SSI);
reading ~~(2)~~, during a read period (RP), display data (DDA) from the
memory ~~(5)~~ under control of a second address pointer (AP2) having a start address
(SSA) being determined by display frame synchronization instants (DSI) having a
display frame rate (DFR);
displaying ~~(3)~~ the display data (DDA) on a matrix display ~~(4)~~; and
controlling ~~(2)~~ the source frame rate (SFR) or the display frame rate
(DFR) to obtain, in a stable situation, the first address pointer (AP1) and the second
address pointer (AP2) starting with an offset in time (TO) which has a fixed polarity
during the read period (RP), and a ratio of two between the display frame rate (DFR)
and the source frame rate (SFR).

2. *(Currently Amended)* A display system comprising
a video source ~~(1)~~ for generating images comprising source data (SDA)
and source frame synchronization instants (SSI) having a source frame rate (SFR);
means for storing ~~(2)~~ the source data (SDA) in a frame memory ~~(5)~~
under control of a first address pointer (AP1) having a start address (DSA) being
determined by the source frame synchronization instants (SSI);
means for reading ~~(2)~~, during a read period (RP), display data (DDA)
from the memory ~~(5)~~ under control of a second address pointer (AP2) having a start
address (SSA) being determined by display frame synchronization instants (DSI)
having a display frame rate (DFR);
means for displaying ~~(3)~~ the display data (DDA) on a matrix display
~~(4)~~; and
means for controlling ~~(2)~~ the source frame rate (SFR) or the display
frame rate (DFR) to obtain, in a stable situation, the first address pointer (AP1) and

the second address pointer (~~AP2~~) starting with an offset in time (~~TO~~) which has a fixed polarity during the read period (~~RP~~), and a ratio of two between the display frame rate (~~DFR~~) and the source frame rate (~~SFR~~)

3. (*Currently Amended*) A display system as claimed in claim 2, wherein the means for controlling (~~2~~) comprise:

means for comparing (~~33~~) the source frame synchronization instants (~~SSI~~) and the display synchronization instants (~~DSI~~) or signals related thereto, and

means for adapting (~~33~~) the source frame rate (~~SFR~~) or the display frame rate (~~DFR~~) in response to the comparing (~~33~~) to obtain the second pointer (~~AP2~~) always lagging the first pointer (~~AP1~~) during the read period in time (~~RP~~), or the other way around.

4. (*Currently Amended*) A display system claimed in claim 2, wherein the means for controlling (~~2~~) comprise:

means for determining (~~33~~) the offset in time (~~TO~~) between one of the source frame synchronization instants (~~SSI~~) and one of the display frame synchronization instants (~~DSI~~) succeeding each other, and

means for adapting (~~33~~) the source frame rate (~~SFR~~) or the display frame rate (~~DFR~~) to obtain a substantially identical source frame rate (~~SFR~~) and display frame rate (~~DFR~~), and a predetermined fixed value of the offset in time (~~TO~~).

5. (*Currently Amended*) A display system as claimed in claim 4, wherein the means for adapting (~~33~~) are arranged to obtain the offset in time (~~TO~~) between the first pointer (~~AP1~~) and the second pointer (~~AP2~~) being substantially equal to half a source write period (~~WP~~), the source write period (~~WP~~) being the period in time required for the storing (~~2~~) of the source data (~~SDA~~) of one source frame of the source data (~~SDA~~).

6. (*Currently Amended*) A display system as claimed in claim 2, wherein the means for displaying (~~3~~) the display data (~~DDA~~) further comprise:

means for generating (~~322~~) a clock signal (~~CLK~~), and

means for generating ~~(320)~~ the display frame synchronization instants ~~(DSI)~~ using the clock signal ~~(CLK)~~, and wherein
the means for controlling ~~(2)~~ the display frame rate ~~(DFR)~~ comprise
means for adapting ~~(32)~~ a frequency of the clock signal ~~(CLK)~~.

7. *(Currently Amended)* A display system as claimed in claim 2, wherein the
means for displaying ~~(3)~~ the display data ~~(DDA)~~ further comprise:

means for generating ~~(322)~~ a clock signal ~~(CLK)~~,
means for generating ~~(321)~~ line instants ~~(LI)~~ indicating a start of the
lines of the display data ~~(DDA)~~ using the clock signal ~~(CLK)~~, the line instants ~~(LI)~~
determining line periods ~~(TL)~~, and
means for generating ~~(320)~~ the display frame synchronization instants ~~(DSI)~~ using the line instants ~~(LI)~~, and wherein
the means for controlling ~~(2)~~ the display frame rate ~~(DFR)~~ comprise
means for adapting ~~(32)~~ a frequency of the clock signal ~~(CLK)~~ to vary a duration of
the line periods ~~(TL)~~.

8. *(Currently Amended)* A display system as claimed in claim 2, wherein the
means for displaying ~~(3)~~ the display data ~~(DDA)~~ further comprise:

means for generating ~~(322)~~ a clock signal ~~(CLK)~~,
means for generating ~~(321)~~ line instants ~~(LI)~~ indicating a start of the
lines of the display data ~~(DDA)~~ by counting the clock signal ~~(CLK)~~, the line instants ~~(LI)~~
determining line periods ~~(TL)~~, and
means for generating ~~(320)~~ the display frame synchronization instants ~~(DSI)~~ using the line instants ~~(LI)~~, and wherein
the means for controlling ~~(2)~~ the display frame rate ~~(DFR)~~ comprise
means for adapting ~~(32)~~ the line periods ~~(TL)~~ by varying a number of clock pulses of
the clock signal ~~(CLK)~~ to be counted.

9. *(Currently Amended)* A display system method as claimed in claim 2,
wherein a display frame period ~~(DFP)~~ has a duration being an inverse of the display
frame rate ~~(DFR)~~ and comprises the means for read period ~~(RP)~~ and an idle period
~~(ID)~~, wherein during the read period ~~(RP)~~, the means for reading ~~(2)~~ are arranged for

reading the display data (~~DDA~~) from the memory (~~S~~) under control of the second address pointer (~~AP2~~), and wherein during the idle period (~~ID~~) no display data (~~DDA~~) is read from the memory (~~S~~), and wherein the means for controlling (~~2~~) the display frame rate (~~DFR~~) comprises means for varying the idle time (~~ID~~).

10. (*Currently Amended*) A display system as claimed in claim 2, wherein the means for controlling (~~2~~) comprise:

means for determining (~~33~~) the offset in time (~~OT~~), and

means for adapting (~~33~~) the display frame rate (~~DFR~~) to obtain a display frame rate (~~DFR~~) being substantially identical to two times the source frame rate (~~SFR~~) and to obtain a predetermined fixed offset in time (~~OT~~), by having

(i) the second pointer (~~AP2~~) pointing to a first source video line (~~1~~) of an already stored source video frame (~~F1~~) at an instant (~~t13~~) preceding the instant (~~t14~~) the first pointer (~~AP1~~) is pointing to a first source video line (~~1'~~) of a next source video frame (~~F2~~) to read the first source video line (~~1~~) before the first source video line (~~1'~~) of the next source video frame (~~F2~~) is stored, and

(ii) the second pointer (~~AP2~~) pointing to a last source video line (~~N'~~) of the next source video frame (~~F2~~) at an instant (~~t19~~) later than an instant (~~t17~~) the first pointer (~~AP1~~) is pointing to the last source video line (~~N'~~) of the next source video frame (~~F2~~) to read the last source video line (~~N'~~) of the next source video frame (~~F2~~) after it has been stored.

11. (*Currently Amended*) A display system as claimed in claim 2, wherein a display frame period (~~DFP~~) has a duration being an inverse of the display frame rate (~~DFR~~) and comprises the read period (~~RP~~) and an idle period (~~ID~~), wherein during the read period (~~RP~~), the means for reading (~~2~~) are arranged for reading the display data (~~DDA~~) from the memory (~~S~~) under control of the second address pointer (~~AP2~~), and wherein during the idle period (~~ID~~) no display data (~~DDA~~) is read from the memory (~~S~~), and wherein the means for controlling (~~2~~) comprise:

means for setting (~~32~~) a free running display frame rate to a value lower than the value of the source display frame rate (~~SFR~~), wherein a duration of the read period (~~RP~~) is shorter than a source frame period (~~SFP~~), and

means for restarting (32) the display frame periods (DFP) in response
to received source synchronization instants (SSI).